2011 Differentiated Instruction Institute:
"Just Right—Right Now"—Across the Spectrum

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Differentiation in Practice: Instruction for Maximum Learning for All Students

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Why Differentiate?

Because the learning experience in the classroom does not meet the needs of every child—especially Title I students.

Because students possess a wide range of interests and background knowledge

Because we underestimate talents and gifts of young people particularly when their gifts do not fit into the box called "School."

Why differentiated instruction?

"There is nothing so unequal as treating unequals equally"

Carol Tomlinson

Carol Ann Tomlinson acknowledges the challenge:

"When someone suggests that we move toward more flexible instruction, the response is often driven by uncertainty. Common responses are *"I don't have time to do all those extra things"* and *"I don't even know where to start."*

"Few people suggest that it is easy to change habits, but many people demonstrate the possibility of doing so, one step at a time.

It requires persistent intent for teachers to break old teaching habits and replace them with routines that are flexible enough to support the success of many kinds of learners."

If we are to achieve a richer culture … we must recognize the whole gamut of human potentialities, and so weave a less arbitrary social fabric, one in which each diverse human gift will find a fitting place.

Margaret Mead

Back Story

Once upon a time….

Reading, Title I, Gifted,
and Differentiation Specialists

Teach All Learners

Model Lessons	Share Lessons	Parallel Teach
Station & Center Activities	Small Group (Title I) Support	Small Group Extension

Differentiation means teachers….

- design instruction for all learners (Title I)
- take into account achievement levels, experiences and interest of students;
- engage learners in activities that stimulate thinking and help them make connections to prior knowledge;
- and, assess students daily using a variety of assessment tools.

What Do You Think?

Directions: Read the statements below and mark whether you *think* they are true or false.

True	False	Statement
T	F	1. In order for differentiation to be successful, students must always work in groups at their achievement levels.
T	F	2. Scaffolding means providing support at the student's level of need in order for him or her to progress toward new understanding.
T	F	3. Higher-level, complex thinking can be built into every tier of instruction.
T	F	4. Leveled textbooks and leveled resource materials should be used by teachers to tier instruction.
T	F	5. Assessment of student progress should be made weekly.

4 key targets to help you meet the needs of struggling learners

1. Assess to know your learners
2. Design brain-compatible lessons based on assessments
3. Incorporate differentiation strategies based on content, product, and process
4. Involve students as partners in learning

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Know your learners: Assess and Scaffold to meet Students' Needs

- Focus on assessment for learning
- Use a range of assessments
- Build in self-assessment by students
- Track results
- Provide rich, authentic feedback

10 Tiered Instruction Targets

	I'm there!	I'm making good progress.	I'm trying to move in that direction
1. I identify the essential understandings that I want students to know.			
2. If you asked the students in my class, they would be able to tell you the goals of what I am teaching.			
3. I pre-assess my students to determine strengths and needs.			
4. I plan the final assessment before designing the instruction.			
5. I use assessment to help determine student groupings.			
6. I arrange my groups flexibly; they may vary daily.			
7. I design interesting and relevant lessons to hook and engage the learner.			
8. I create tasks with difficulty and skill levels that are slightly above students' levels.			
9. I begin by first determining on-level tasks that meet the essential understandings, and then I scaffold up or down for students as needed.			
10. I adjust the complexity, support, pace, materials, and/or directions to meet the needs of learners.			

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Assessment 101

Know Instructional Reading Levels

Regardless of how students are assessed, having a fix on the level at which a student reads text independently, as well as his or her instructional reading level will allow you to secure the materials necessary to differentiate instruction for your particular group.

Dear students:

I want to get your input about how this class has gone for you du... I will use your response to help me prepare for the ne... and to the questions below. You will NOT ne...

Students are our clients. Ask them what they think.

...following:

___ self-assessmeent
___"look fors" that detail what is expected
___independent study
___partner projects

___...o I work with
___opportunities to use technology
___resources other than the textbook

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2 Design differentiated lessons with the brain in mind

- Do the work "up front"
- Activate prior knowledge
- Plan for "attention state" adjustments
- Design for rigorous engagement
- Provide rich, authentic feedback

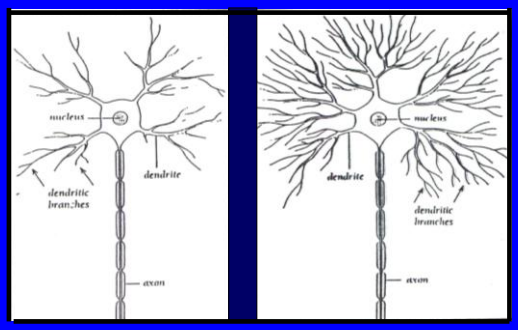
Brain-compatible lesson design provides answers to questions:

- How do I differentiate lessons?
- How do I get students to remember what I've taught?
- How do I keep students engaged in rigorous and relevant activities?
- How can I stretch their thinking?
- How can I get my squirrelly students to pay attention?

Environment Changes the Brain

Enriched environments
- increased cell weight
- increased growth of synapses

Impoverished environments
- decrease in cell weight,
- possible loss of cells,
- diminished growth in synapses



Experience sculpts the brain.

- Between the second month in utero and the age of two, each neuron in the cortex forms an average of 1.8 synapses per second.
- Which synapses remain, and which are pruned, depends on whether or not they carry any traffic. If not used, then like bus routes that attract no customers, they go out of business.

Neurons that fire together, wire together."

LTP Long Term Potentiation— the process of connections in the brain becoming more permanent (learning.)

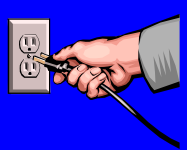
The more permanent the connection, the greater the mylineation.

The second time a synapse fires, it takes less neurotransmitter (and so on...)

Our brains mylinate from back to front and inside to outside (according to how we survive.)

No connections....no Meaning

The brain is continuously trying to make sense out of the world, attempting to determine what is meaningful in what it experiences.



Every encounter with something new requires the brain to fit the new information into an existing memory category, or network of neurons.

If it can't, the information will have no meaning.

Effective instruction requires teachers to…

- **Find the experiences students have had and hook new learning to them or…**
- **Create the experiences with students**

2 **Design differentiated lessons with the brain in mind**

- Do the work "up front"
- Activate prior knowledge
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APK

The importance of connecting new content to prior knowledge cannot be over-emphasized!!!!!

Activating Prior Knowledge

APK

Is essential for memory and learning…and thinking!

SCENARIO 1 & 2

Do we know "it" when we see it?!

(page 39)

Consider these two approaches to activating prior knowledge in fifth grade social studies classes and think about which one builds more connections:

Scenario 1

Teacher: "Today we will be starting a unit on the conditions in the states following the Civil War. It was a period of time referred to as Reconstruction. What do you think of when you hear the word Reconstruction?"

Max: "It must mean that something was torn down because it has to be constructed again."

Teacher: "Thank you, Max. Who has another thought?"

Sophie: "When a tree fell on our house in the storm, we had to reconstruct the garage roof."

Teacher: "Good connection. Can someone else give me an idea?"

Reggie: "When things are broken, like my little brother breaks my toys, I try to put them back together. Isn't that reconstruction?"

Teacher: "All these ideas tell us something about Reconstruction. Turn to page 128 in your book and let's get some more information."

Scenario 2

Teacher: "I want to show you several photographs from cities and towns that were taken during and right after the Civil War. While I do that I want you to write down descriptive words or phrases that come to mind when you see the pictures."

Teacher: "Now, I want you to share these words with one or two people next to you and see if you can add new ones to your own list."

Teacher: "Tell me some of the words and I will write them on the chart paper?"

Students: "destruction, ruin, bombed out, death, abandoned, lonely, hungry, poor, wounded, broken, destroyed, help, sad, homeless, hopeful, lost, start over"

Teacher: "So…here's my question. Why is the period right after the civil war referred to as "Reconstruction?" Using what you know and additional information you might have gathered from the pictures, talk to your neighbor(s) and come up with as many areas as you can that you think needed "reconstructing?"

(Students list areas and support responses.)

Teacher: "Here's a follow-up question. Have there been times in your lives when a period of "reconstruction" has existed either personally or in our country or world?"

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Engaging Learners

OPTIMAL USE OF TIME

IT'S ALL IN THE DESIGN—LESSON DESIGN THAT IS!

How long do students stay focused in the same "attention state?"

The age of the learner plus or minus two minutes.

Young learners: 5-10 minutes

Adolescents: 15-20 minutes

Adults: about 20-25

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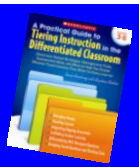
4 key targets to help you meet the needs of struggling learners



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3 Incorporate differentiation strategies based on content, product, and process.

- Use Teacher Self-Check Lists
- Use non-fiction and fiction resources at a range of reading levels in all grades and across all content areas
- Establish clear "look fors" and build in self-assessment on the part of students
- Allow for differentiated products

Teacher Self-Checklist for Differentiation of Content	Notes to Self
What is the content that I am to teach for this lesson or unit?	
What does the learning target tell me that students need to know and be able to do?	
Which information is most essential to the learner?	
What are the big ideas of this lesson or unit?	
What are the key vocabulary terms that students must learn?	
Are the vocabulary terms part of each student's existing background knowledge or will I need to build this understanding for all or a portion of the class?	
If a portion, which students will need to have additional support to acquire content vocabulary?	
How will I determine what my students know already so I can build upon (scaffold) their learning?	
Can related content be brought in to expand thinking and provide enrichment for students who move ahead quickly?	

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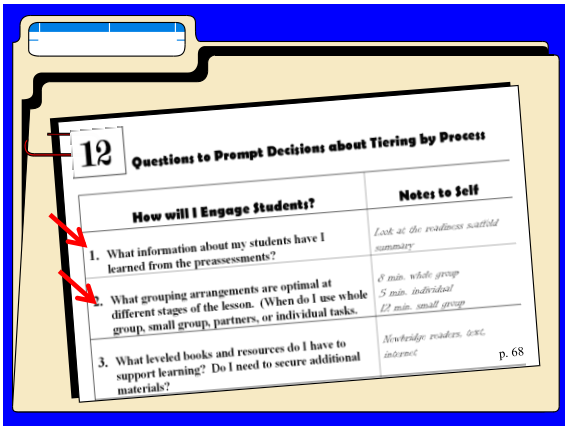

12 Questions to Prompt Decisions about Tiering by Process

How will I Engage Students?	Notes to Self
1. What information about my students have I learned from the preassessments?	*Look at the readiness scaffold summary*
2. What grouping arrangements are optimal at different stages of the lesson. (When do I use whole group, small group, partners, or individual tasks.	*8 min. whole group* *5 min. individual* *12 min. small group*
3. What leveled books and resources do I have to support learning? Do I need to secure additional materials?	*Newbridge readers, text, internet*

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Use non-fiction and fiction resources at a range of reading levels in all grades and across all content areas

Establish clear "LOOK FORS"

Students perform at their highest levels when they are very clear about expectations. Criteria lists or "look fors" for class work and projects guide students and serve as tools for self-monitoring.

4 Involve Students as Partners in Learning

1. Work with students to ensure relevance of content
2. Survey interest areas
3. Complete "I Can" Self-Assessments
4. Journal about "What Works/What Doesn't" in class
5. Involve students in creating assessments/tests to be used for a grade

Student Writers Workshop Look Fors

Student's Writers Workshop Look Fors

I know my audience for writing.		
I write for different reasons.		
I talk to a friend or a teacher to help me with my ideas.		
I edit my writing to make it more readable.		
I use rich vocabulary when I write		

Students work in pairs to identify ten key facts of the American revolution. As a group, the teacher and students compile the ten most important facts/concepts. These items are the Look Fors that must be evident in the project on the same time period.

Self- Assessment on the Build-It 3D Unit

Skills in Build It-3D	Very Confident	Somewhat Confident	Still Need Help
1. I can use a protractor.			
2. I can find the sum of angles of triangles and quadrilaterals.			
3. I can explain when and why shapes are congruent.			
4. I can sort triangles and quadrilaterals.			
5. I can name 2D figures from drawings			

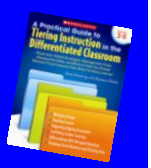
Self-Assessment for Teachers

10 Ways to Differentiate Instruction

	Do I Differentiate using...	Always	Sometimes	Seldom	Never
1.	...assessment data				
	a. interest surveys				
	b. learning style inventories				
	c. brain-compatible indicators				
	d. skill competency checklists				
	e. pre- and post-test results				
2.	...the content level of the material				
	a. different levels of textbooks				
	b. different levels of resource materials				
	c. textbook(s) on audio				
	d. interactive, student-directed instruction				
	e. first person accounts				
3.	...a variety of resources				
	a. peer and volunteer resources				
	b. library books and reference materials				
	c. primary documents				
	d. computers				
	e. use of internet technologies				

Let's Revisit

4 key targets to help you meet the needs of struggling learners



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The bottom line is we must be *intentional* about differentiating instruction for struggling learners.